TALKING POINTS FOR ADMINISTRATOR BOLDEN

ORION EFT-1 GUEST RECEPTION

Dec. 4, 2014

- Thank you all for coming. Today you have a chance to see history in the making -- the launch of a new, unique spacecraft to the environment in which it will travel on future missions to deep space.

- This morning's test flight will mark another step on our journey to Mars.

- In some ways, NASA has been planning for this journey since our founding a half-century ago.

- Every mission we have undertaken, every jaw-dropping "first" we have achieved, has helped us prepare for a human mission to Mars.

- For 40 years, increasingly advanced robotic explorers have studied the conditions on Mars.

- This has dramatically increased our scientific knowledge about the Red planet -- and helped pave the way for astronauts.

- We're also using the International Space Station to conduct cutting-edge research and technology development and increase our knowledge about what it takes to live and work for long periods of time in space.

- And now *Orion*, launched in the future on the Space Launch System, will push the boundaries and take American astronauts farther than ever before, beyond the Moon, on to an asteroid and eventually to Mars.

- Each step of the way, we will test new systems and capabilities needed to get there.

- This week is all about *Orion*, but I also want to make a quick note about another NASA milestone. This Saturday, NASA's *New Horizons* spacecraft comes out of hibernation for the final time and readies for its historic encounter with Pluto next July. After almost nine years of flight, *New Horizons* is literally on Pluto's doorstep – on schedule, in good health, and on course. We look forward to the spacecraft's arrival at Pluto. It's another example of NASA reaching for big goals and raising the bar of human achievement.

- So now, we've done a lot of work here on the ground, and the best test we can do of *Orion* is to fly it in space.

- There are about 1,200 sensors on *Orion* that will provide data about the environment inside and outside the spacecraft, such as radiation levels, pressures, and temperatures.

- This morning's flight and recovery will provide critical data we need to improve *Orion's* design and reduce risks to its future crews.

- This amazing vehicle will reach a speed of 20,000 mph and temperatures of 4,000 degrees Fahrenheit.

- Others can tell you in greater detail about how *Orion's* flight test will stress systems critical to safety, including the heat shield, parachutes, avionics and attitude control.

- All of this will inform the first crewed flight of *Orion* in just a few years and keep us marching forward on our journey to Mars.

- The test demonstrates how Bob Cabana and the Kennedy Space Center team continue to transform this center into a multi-user facility capable of many different kinds of launches and it's possibly the most significant human spaceflight milestone this year pointing toward our return with humans to deep space.

- A big thanks to all of the teams who have worked so hard to get us ready for this test flight. Godspeed – and go *Orion*!